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| APPLICATION NO.           | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/785,383                | 02/24/2004  | Ernest J. Storrer    | INJS-1-1003         | 6508             |
| 25315                     | 7590        | 11/03/2005           | EXAMINER            |                  |
| BLACK LOWE & GRAHAM, PLLC |             |                      | LU, JIPING          |                  |
| 701 FIFTH AVENUE          |             |                      |                     |                  |
| SUITE 4800                |             |                      | ART UNIT            | PAPER NUMBER     |
| SEATTLE, WA 98104         |             |                      | 3749                |                  |

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/785,383             | STORRER ET AL.      |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Jiping Lu              | 3749                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 August 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/16/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Figures 11, 12,13A, claims 6-9,11-16 and 18 in the reply filed on 8/15/2005 is acknowledged. In view of applicant's admission that the embodiments of the claimed design are obvious variation of one another to one ordinary skill in the art and the embodiments are not separate and distinct inventions, the restriction requirement in the last office action is hereby withdrawn. Claims 1-18 are rejected as follows.

***Information Disclosure Statement***

2. Items F1 to F4 and O1 of the information disclosure statement filed 8/16/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. Therefore, the information referred to these items has not been considered.

***Inventorship***

3. The request to correct inventorship filed 8/16/2004 is denied because it lacks the required fee under 37 CFR 1.17(i).

***Specification***

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because the phrase "The invention provides" used in abstract is improper. Correction is required. See MPEP § 608.01(b).

#### *Claim Objections*

6. Claims 14-16 are objected to because of the following informalities: please change "The system of" in the beginning of claims 14-16 to --The method of-- to further limit the method claim 11. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 112*

7. Claims 17-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification failed to disclose what kind of means is for placing at least one vacuum chamber/mat.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 6-9 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (U. S. Pat. 5,870,797).

Anderson shows a surface drying system comprising: a vacuum mat 11 having a surface with at least one vacuum port (at 12) and a plurality of channels 10; and a vacuum source 33 connected with the port, wherein the vacuum source creates an enclosure of negative pressure within the perimeter of the mat and urges water to flow through the channels towards the vacuum source to effect moisture removal. For claims 7-8, see Fig. 1C. For claim 9, manifold 13 having at least one nozzle, the first end of the nozzle in fluid communication with the vacuum source 33 and the second end of the nozzle in fluid communication with the mat 11.

Anderson also show a system for removing moisture, the system comprising: a means (inherent by hand or other device) for placing at least one vacuum mat 11 having a manifold 13 over a surface, the mat configured to have a lattice formation, the lattice formation providing spaces; a means (top portion of 13) for connecting the manifold with a vacuum source; and a means 33 for applying a vacuum, wherein negative pressure causes water to flow through the spaces within the lattice formation to the vacuum source to effect moisture removal underneath and from the surface. As for limitation “water impermeable vacuum mat”, it is view as functional or intended use limitations. As MPEP 2114 states, “[a] claim containing a “recitation

with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitation of the claim". In this case, the limitation of "water impermeable vacuum mat" do not add any structural limitation to the claim and Anderson discloses all the structural limitations. Additionally while not disclosed, the means of Anderson is capable of placing the water impermeable vacuum mat over a surface.

10. Claims 6-9, 11-15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Wenander (U. S. Pat. 4,203,714).

Wenander shows a surface drying system comprising: a vacuum mat 2,5-7 having a surface with at least one vacuum port 11 and a plurality of channels (between 9); and a vacuum source (col. 2, lines 35-36) connected with the port, wherein the vacuum source creates an enclosure of negative pressure within the perimeter of the mat and urges water to flow through the channels towards the vacuum source to effect moisture removal. For claims 7-8, see Fig. 1. For claim 9, manifold 3 having at least one nozzle 4, the first end of the nozzle in fluid communication with the vacuum source and the second end of the nozzle in fluid communication with the mat.

Wenander also shows a method for removing moisture, the method comprising: placing at least one water impermeable vacuum mat 2, 5-6 having a manifold 3 over a surface 1, the mat configured to have a lattice formation (see Fig. 1), the lattice formation providing spaces; connecting the manifold 3 with a vacuum source (col. 2, lines 35-36); and applying a vacuum, wherein negative pressure causes water to flow through the spaces within the lattice formation to the vacuum source to effect moisture removal underneath and from the surface.

Wenander also show a system for removing moisture, the system comprising: a means (inherent by hand or other device) for placing at least one water impermeable vacuum mat 2, 5-6 having a manifold 3 over a surface 1, the mat configured to have a lattice formation, the lattice formation providing spaces; a means (not shown, inherent) for connecting the manifold with a vacuum source; and a means (col. 2, lines 35-36) for applying a vacuum, wherein negative pressure causes water to flow through the spaces within the lattice formation to the vacuum source to effect moisture removal underneath and from the surface.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wenander (U. S. Pat. 4,203,714).

The moisture removing method of Wenander as above includes all that is recited in claim 16 except for a second vacuum mat placed on a second plane. It would have been an obvious matter of design choice to place any number of vacuum mat on any desired plane in order to obtain the optimum result since applicant has not disclosed that the claimed step of placing second vacuum mat on second plane solves any stated problem in a new or unexpected way or is for any particular purpose which is unobvious to one of ordinary skill in the art.

14. Claims 1-5, 10, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U. S. Pat. 5,870,797) or Wenander (U. S. Pat. 4,203,714).

The moisture removing apparatus of Anderson or Wenander as above includes all that is recited in claim 1-5, 10, 17 except for using a vacuum chamber for removing the water from a surface. However, it would have been obvious to one skill in the art at the time the invention was made to substitute a vacuum chamber for the vacuum mat of Anderson or Wenander for removing the water from a surface since applicants admitted that embodiment of the claimed design in claims 1-5, 10, 17 is obvious variation of the embodiment as claimed in claims 6-9, 11-16 and 18 to one ordinary skill in the art therefore the claims 1-5, 10, 17 and claims 6-9, 11-16, 18 are not separate and distinct.

### *Conclusion*

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, EHUD GARTENBERG can be reached on 571 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jiping Lu  
Primary Examiner  
Art Unit 3749

J. L.